

PATENT
Patent App. Ser. No. 10/786,494
The Eclipse Group Docket No. HI08025USU (P03138US)

REMARKS

Claims 1-6 are pending in this present application. In the September 8, 2008 Final Office Action, the Examiner:

1. Rejected claims 1, 5 under 35 U.S.C. § 102(b) as being anticipated by Pla et al. (5,402,669);
2. Rejected claims 2, 6 under 35 U.S.C. § 103(a) as being unpatentable over by Pla et al. (5,402,669);
3. Rejected claims 3-4 under 35 U.S.C. § 103(a) as being unpatentable over Pla et al. (5,402,669) and further in view of Shuttleworth (2002/0071568 A1) and Flentje (US 2002/0048379 A1).

Applicants have amended claims 1-6 to address matters of form and to correct various grammatical and typographical errors. Applicants respectfully submit that no new matter has been added. As to the rejections, Applicants traverse.

I. RESPONSE TO EXAMINER'S RESPONSE TO ARGUMENTS FILED MAY 12, 2008

In the September 8, 2008 Final Office Action, the Examiner maintained the rejections made in the February 7, 2008 Non-Final Office Action. Applicants argued in the May 12, 2008 that Pla does not teach the following limitations¹:

1. loudspeaker emitting periodic noise signals; and
2. comparing the response with model signals stored in the processor.

In maintaining the rejections, the Examiner stated:

Applicant's arguments filed 5/12/08 have been fully considered with regard to Pal (sic) et al. failing to disclose of the following limitation as included in the claim wherein the {"loudspeaker emitting periodic noise signal" and "evaluating the response of each of the response signals of each of the microphones and filters as a response to the signals" and "comparing the response with

¹ Applicants note that the May 12, 2008 arguments paraphrased corresponding limitations in independent claims 1, 2 and 5. Applicants note that the claim amendments in this response do not significantly alter the scope of the limitations in the previous claims. Therefore, the descriptions paraphrasing the limitations from the May 12, 2008 arguments shall be used herein to describe the subject matter that was distinguished from Pla in the May 12, 2008 response.

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models signals stored in the processor"}, but such argument are (sic) are non-persuasive.

Please, Note, Pal et al. did disclose of the specific wherein the "evaluating the response of each of the response signals of each of the microphones and filters as a response to the signals and comparing the response with models signals in the processor; (fig. 2 wt (58,60, 26,56); col. 4 line 15-45; col. 3 line 25-34/to match with ref filter with processor for each filters with associating microphones with the reference filters").

And similarly, for the "loudspeaker emitting periodic noise signals", Note that Pal disclose of the loudspeaker emitting an (sic) output signals according to the reference known electrical signal and such that this electrical signal has sampling interval and outputting digital outputting signals for each sampling interval (col. 2 line 45-55; col. 3 line 1-10/to emit pure tone signal).

See September 8, 2008 Final Office Action, "Response to Arguments," pg. 2.

Applicants respectfully submit that, with respect to the Examiner's analysis under § 102(b), the Examiner improperly interpreted claim limitations individually, in isolation, failing to consider the context in which the terms are used in the claim. With respect to the § 103(a) analysis, the Examiner's analysis also ignores what the references actually teach as well as "the following tenets of patent law that must be adhered to when applying § 103:

- (1) the claimed invention must be considered *as a whole* (35 U.S.C. § 103; see, e.g., *Jones v. Hardy*, 727 F.2d 1524, 1529, 220 USPQ 1021, 1024 (Fed. Cir. 1984) (though the difference between claimed invention and prior art may seem slight, it may also have been the key to advancement of the art));
- (2) the references must be considered *as a whole* and suggest the desirability and thus the obviousness of making the combination (see, e.g., *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984));
- (3) the references must be viewed without the benefit of hindsight vision afforded by the claimed invention (e.g., *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983));

....

See *Haduch v. Block Drug Co. Inc.*, 786 F.2d 1136, 1143 n. 5 (Fed. Cir. 1986) (emphasis added).

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Applicants respectfully submit that independent claims 1 and 5 are not anticipated by Pla, and independent claim 2 is not obvious over Pla.

The Examiner rejected claims 1 and 5 under 35 U.S.C §102(b) as being anticipated by Pla. Applicants respectfully submit that claims 1 and 5 are not anticipated by Pla. Pla fails to teach "loudspeaker emitting periodic noise signals" and "comparing the response with model signals stored in the processor" as argued by Applicants in the May 12, 2008 response. Pla also fails to teach an "array microphone."

A. Examiner's Argument regarding "loudspeaker emitting periodic noise signals"

In response to Applicants arguments, the Examiner stated that Pla teaches "loudspeaker emitting periodic noise signals" stating that "Pla disclose of the loudspeaker emitting an (sic) output signals according to the reference known electrical signal and such that this electrical signal has sampling interval and outputting digital outputting signals for each sampling interval (col. 2 line 45-55; col. 3 line 1-10/to emit pure tone signal)."

The first passage cited by the Examiner states:

... ing 18) such that it may be exposed to a source transducer 20. The source transducer 20 is driven by a reference electrical signal 22 from a signal generator 24 and can produce the physical quantity sensed by the first sensor 14. It is noted that reference electrical signal 22 can be any arbitrary electrical signal including, but not limited to, an analog or digital electrical signal which may be broadband, narrowband, or pure tone, etc. Preferably, the first sensor 14 is a reference sensor having an independently-calibrated amplitude and phase response. Preferably, the source transmitter 20 is a loudspeaker.

Pla 2:45-55. The second passage cited by the Examiner states:

...ence electrical-signal processor 26. The reference electrical-signal processor 26 comprises an analog-to-digital converter having an analog input side operatively connected to the reference electrical signal 22, having a sampling interval, and having a digital output side yielding a reference digital output 28 for each sampling interval to present the reference electrical signal 22 of the signal generator 24 as the reference digital output 28. In many

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applications, as can be appreciated by the artisan, the reference electrical-signal processor 26 may also ...

Pla 3:1-10. The Examiner argues that Pla thus teaches the subject matter in the cited passages “to emit pure tone signal.” However, “to emit pure tone signal” is not recited in the claims. The claim recites emitting a “periodic noise signal.” Pla teaches matching a microphone to a reference microphone. The reference microphone picks up a reference signal emitted by a loudspeaker connected to the sound source, which is a signal generator. Pla 2:47. Pla teaches generating the tone signal to be picked up by the reference microphone and by unmatched microphones for purposes of matching the unmatched microphones to the reference microphone. Pla does not teach generating a periodic noise signal that may be used to identify background noise created by the environment or by the speaker and/or microphones themselves. The periodic noise signal enables testing and calibration of the microphone array in the environment in which they will be used. Pla teaches using a special test arrangement intended to keep noise out. Therefore, the Examiner erred in interpreting the “periodic noise signal” as being any tone signal by failing to consider the context in which the periodic noise signal is used.

B. Examiner’s Argument Regarding “comparing the response with model signals stored in the processor”

In response to Applicants arguments, the Examiner stated that Pla teaches “wherein the ‘evaluating the response of each of the response signals of each of the microphones and filters as a response to the signals and comparing the response with model signals stored in the processor; (fig. 2 wt (58,60,26,56); col. 4 line 15-45; col. 3 line 25-34/to match with ref filter with processor for each filters with associating microphones with the reference filter’). The cited passages describe matching unmatched microphones and filters to matched microphones and filters using a reference signal. The matching is performed in a special test chamber that eliminates background noise. Pla does not teach using a model signal that accounts for the space and direction of the microphone to the sound source.

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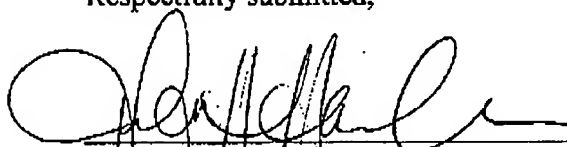
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II. CONCLUSION

Claims 1-6 are not anticipated nor obvious over Pla as argued by the Examiner in the September 8, 2008 Final Office Action. Favorable consideration is respectfully requested in view of the foregoing amendments and remarks.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to our Deposit Account No. 50-2542. A copy of this sheet is enclosed.

Respectfully submitted,

Dated: 1/8/09

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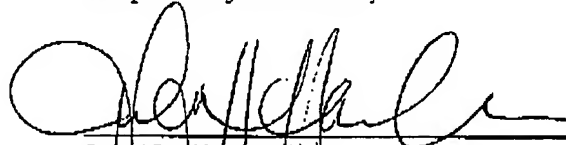
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